so in the other but variable in both); the ventral half of the prepectus is not rugulose but near caudal margin has a cross-row of foveæ; the middle section or finely punctate portion of the mesopleurum is larger (a third wider), as wide as the third or caudal or the section with cross-rugæ; the propodeum and prepectus are wholly black; and the abdomen from above is finely scaly after segment 2 (not until after 4 in the other). A variety has black spots above on the first two pairs of femora, the cephalic tibiæ are black centrally dorsad, the middle tibiæ wholly black.

The male is similar except that the scape is black. Petiole twice longer than wide: funicle 5-jointed.

From two males, seven females taken from the pupal chambers of *Pissodes strobi* in September, 1916, as larvæ and reared several months later. Taylor's Falls, Minn. (S. A. Graham). Types: Cat. No. 20,969, U. S. Nat. Mus., one male, four females on four tags.

In New York it appears as an adult in May.

## THREE NEW SPECIES OF THE NEW GENUS ANDRENA FROM THE UNITED STATES (HYMENOPTERA, ACULEATA).

By J. R. Malloch, Urbana, Ill.

The three species described in the present paper are probably represented in other collections, and it is quite possible that *regularis* is confused with *carlini* or even with *vicina* in collections from the eastern states.

Andrena banksi n. sp. Male.—Black, clypeus lemon-yellow. Head shining, glossy behind eyes and on lower part of face; antennæ subopaque. Thorax subopaque, slightly shining on posterior half of pleuræ. Abdomen glossy. Surface hairs grayish, or those on disc of thorax slightly yellowish.

Head distinctly broader than high; clypeus glossy, flattened, and almost impunctate on center of disc, the punctures becoming more numerous and much closer towards each lateral angle; anterior central outline of clypeus broad, regularly arcuate, the length across equal to that from its outer angle to base of mandible; mandibles long and curved, inner tooth small, well removed from apex, no tooth at base on under side; cheek broader than eye, produced opposite middle of eye into a more or less tooth-like process which projects backward, but rarely reduced, appearing as an angular production of the posterior margin which is more or less accentuated by the presence of a slight concavity at base on its lower margin. Thorax throughout finely and closely shagreened, and indistinctly punctate. Abdomen much less closely shagreened than the thorax, the only punctures present being those at the bases of the rather long, sparse surface-hairs;

fasciæ at apices of segments very faint, distinguishable only laterally; hairs on segments I and 2 very much longer than those on other segments; sixth ventral segment slightly reflexed apically but without lateral angles; seventh with a deep wedge-shaped notch in center of the median produced portion; eighth very similar to that of erythrogastra, terminating in a long, almost parallel-sided process, the apex of which is truncate or slightly rounded; hypopygium somewhat similar to that of andrenoides, differing in having the dorsal processes of the stipites broader, longer, and more nearly truncate apically, and closely contiguous almost to their apices.

Female.—Differs from the male in having the face entirely black, the thoracic hairs bright fulvous, and the apices of the abdominal segments

each with a complete band of whitish hairs.

Foveæ broad, at upper extremity covering about four fifths of space between eye and ocellus, pubescence tawny yellow, lower extremity of foveæ below lower level of antennal insertion; clypeus shagreened and rather remotely and finely punctate except on lower median portion, clypeal structure as in male; mandibles shorter and stouter than in male; malar space about one fifth as high as broad; cheek broader than eye, tapered below and without a distinct angle; basal flagellar joint slightly shorter than 2+3. Thorax as in male; metathoracic enclosure minutely shagreened, basally irregularly granulose. Surface hairs stout, dense, and upright, covered with closely appressed short branches and except under a high magnification appearing simple. Abdomen as in male, the punctures at bases of the upright hairs even less distinct, so that the surface appears impunctate; hairs on segments I and 2 long and upright; fascia on segment I less distinct than on others; pygidium truncate and slightly emarginate at apex. Mid and hind metatarsi narrower than corresponding tibiæ: hind tibiæ broad, of nearly an equal width on their apical three fifths, gradually narrowed to base on remainder; tarsal claws bifid, the inner tooth much shorter than outer. Greatest length of third submarginal cell at least twice that of second; basal nervure distinctly distad of transverse median.

Length: male, 8.5-9.5 mm.; female, 11.5-12.5 mm.

Type locality, Fedor, Texas, March 13–24 (Birkmann). Paratypes, Trinity, Texas, March 20, 2 males on Salix (R. A. Cushman); Beaumont, Texas, March 18 (E. S. Tucker); Great Falls, Maryland, April 21 (N. Banks); Maryland, near Plummers Island, April 19, 21, 22, 7 males on flowers of *Prunus* (L. O. Jackson, H. L. Viereck).

The male of this species is separable from that of any described species by the yellow clypeus and peculiar tooth-like projection of the posterior margin of cheek. The female resembles in some respects *mandibularis* Robertson, but the stout, dense

thoracic hairs, complete abdominal fasciæ, and many minor characters readily distinguished the species.

Named in honor of Nathan Banks, who submitted the first examples of the species which I had seen.

Type and allotype in collection of Illinois State Laboratory of Natural History; paratypes in collections of Nathan Banks and U. S. Bureau of Biological Survey.

Andrena regularis n. sp. Male.—Black, distinctly shining. A few brownish black hairs along inner margins of eyes, on vertex, and behind upper angle of eyes, remainder of hairs of head, those of thorax, and those of abdomen whitish gray. Legs black, hairs whitish except on under surfaces of basal tarsal joints and inner surface of hind tibiæ, where they are brownish. Wings slightly brownish on apices, veins yellow.

Head about one seventh broader than high; third antennal joint one fourth longer than fourth and subequal to fifth; clypeus glossy on disc, shagreened on margins, discal punctures of moderate size, very regularly distributed, no impunctate ventral line present; cheek distinctly broader than eye, rounded posteriorly; malar space narrow, punctate; mandibles long, curved, simple at base, with a weak preapical inner tooth; process of labrum truncate, rather broad. Thoracic hairs long and rather dense; metathoracic enclosure finely rugose. Abdomen with sparse, fine punctures and short, upright hairs; apical ventral segment tapering on its apical two thirds, with a rather sharp ventral production at one third from apxe, and from this point caudad covered with dense hairs, apex stout, slightly fishtail-shaped; hypopygium stout, dorsal processes of the stipites stout, contiguous nearly to their apices, then widely and suddenly diverging, terminating in a rounded point.

Female.—Very similar to carlini Cockerell, differing in having the clypeus with small, rather widely spaced, regular punctures.

Head with pale hairs on center of face and behind vertex, remainder of surface with brownish to black hairs. Dorsum of thorax and upper half of pleuræ with long pale hairs, remainder of surface with black hairs. Abdomen with black hairs which are short except at apex. Hairs of legs black, femoral hairs sometimes pale. Wings as in male.

Clypeus much less conspicuously punctured than in male; foveæ broad, descending below lower margins of antennal sockets, narrowly separated from eyes. Metathoracic enclosure granulose except at base. Scopæ of hind tibiæ simple on outer side; tarsal claws long, bifid. Otherwise as male.

Length: male, 10-12 mm.; female, 12-14 mm.

Type locality, Ithaca, N. Y., April 26 to June 6. A very large series of both sexes submitted by Dr. J. C. Bradley from Cornell University collection. Type and paratypes in the latter

collection; paratypes in collection of Illinois State Laboratory of Natural History and of U. S. Bureau of Biological Survey.

The female of this species closely resembles that of *carlini* but is readily separated from it by the regularly punctate clypeus.

Andrena flexa n. sp. Female.—Black, shining. Hairs on lower margin of clypeus brownish, remainder of hairs on head and thorax yellowish white, abdominal fasciæ white, dense, interrupted centrally; hairs on legs whitish or yellowish, those on base of hind tibiæ, above, brownish. Legs brownish black. Wings slightly brownish, especially at apices; veins dark brown.

Head about one fifth broader than high; foveæ whitish, tapering to a point slightly below lower margin of antennal sockets and narrowly separated from eyes; clypeus shining, with subcontiguous, deep punctures and a distinctly elevated median impunctate linear space; malar space linear except posteriorly, impunctate; back of head about 1.5 times as broad as eye; labrum truncate apically, sides convergent; mandibles short and blunt, simple. Dorsum of thorax closely punctured; metathoracic enclosure broad, granulose. Abdomen densely punctate, the punctures small and deep. Hind tibial scopæ simple outwardly; claws bifid; hind tibiæ with the inner spur distinctly flexed at about one third from apex. Venation normal.

Length, 9.5-10.5 mm.

Type locality, Dubois, Ill., May 15, 1916, and May 24, 1917 (C. A. Hart and J. R. Malloch). On flowers of raspberry and Cratagus.

This species bears a striking superficial resemblance to *cressoni* Robertson, but may be readily separated from it and from all other species known to me by the flexure of the hind tibial spur.

The male is unknown to me.

Type and paratypes in coll. Ill. State Lab. Nat. Hist., paratype in U. S. Bur. Biol. Surv.

## BUPRESTIDÆ AND CERAMBYCIDÆ FROM MAINE.

BY ALAN SLOAN NICOLAY, Brooklyn, N. Y.

From May 1 to the middle of July, 1916, I was in Douglas Hill, Maine, able to collect from morning until night. It is in Cumberland County, elevation about 1,200 feet, three miles from